

**Wayne Community College  
Program Review and Outcome Assessments, 2018-19**

**Institutional Goal 2: Ensure Program Excellence**

**Institutional Goal 3: Improve Student Success**

**Department Name:** Welding Technology

**Mission/Purpose:** The purpose of the Welding Technology Program is to prepare individuals for electrode welding and cutting processes enabling them to understand the science, technology, and applications essential for successful employment in the welding and metalworking industry.

**Degrees, Diplomas, and Certificates Offered:** List all degrees, diplomas, and certificates offered.

Welding Technology Diploma (D50420)

Welding Technology Certificate (C50420WT)

Welding Technology-MIG Welding Certificate (C50420MG)

Welding Technology-TIG Welding Certificate (C50420TG)

Welding Technology-Stick Welding Certificate (C50420S)

**Describe how the program’s mission aligns with the College’s vision, mission, core values, and strategic goals.**

Graduates from the Welding Technology Program will be prepared to begin work in many different types of welding positions. These available positions include: manufacturing and production welding, construction and maintenance welding, as well as welding that would require reading and interpretation of drawings and blue prints.

**Activities to ensure curriculum currency (2015-16; 2016-17; 2017-18)**

List program curriculum changes, revisions, deletions in table.

Course Title	Date – Updated / Revised / Deleted
<i>No curriculum changes, revisions, deletions since 2015-16 Program Review</i>	

**Provide an overview of the significance of the program changes and improvements that occurred over the past three years**

*There have been no significant program curriculum changes, revisions, or deletions since 2015-16.*

**Advisory Committee: dates, summary of minutes, activities (2015-16; 2016-17; 2017-18)**

**Summary of Advisory Committee Activities**

Year	Meeting Dates	Recommendations / Activities
2015-16	<b>12-9-15/7-14-16</b>	-Update on Wayne Works & Fort Macon Cannon Project -NC3 Program & Wayne Works Welding Area layout
2016-17	<b>12-8-16/3-15-17</b>	-Con-Ed Welding Classes/Wayne Works Update & Shop Tour
2017-18	<b>11-1-17/5-1-18</b>	-Shop Tour & Class Schedule/Job Opportunities

**Describe program's participation with Advisory Committee or external organizations that contribute to maintaining program relevance.** (File Advisory Committee Meeting Minutes for past three years in Program Review Attachment folder.)

Advisory Meeting Minutes are filed for 2015-16, 2016-17, and 2017-18 in the Review and Attachments Folder. The Welding Advisory Committee is a very important part of the Welding Program because they represent the companies that tend to hire the majority of the Welding students.

**Analysis of trends in the field or industry**

**Provide narrative for analysis of trends in the field.** (Are there jobs available for your students? Is there new technology/equipment that needs to be added to your program?)

Welders continue to be in high demand because of the diverse use of welding in many industries.

**Faculty Profile**

**List of Faculty and Status (2015-16; 2016-17; 2017-18)**

Faculty / Name	Full-Time / Part-Time
Chad Pate	Full-Time
William Wise	Part-Time
Walker Bittrich	Part-Time Lab Assistant
Michael Bozeman	Part-Time Lab Assistant
Allen Newkirk	Part-Time Lab Assistant

**Have all the faculty credentials been verified?** (Verify required documents are in personnel files.)

Faculty credentials have been verified per Janet Sumner 3-18-19 (WCC Human Resources)

**Faculty Contact and Credit Hours**

Faculty / Name	Full-Time Part-Time	Summer 2015		Fall 2015		Spring 2016	
		Contact	Credit	Contact	Credit	Contact	Credit
Chad Pate	Full-Time	11/18	6	24	12	22	10
William Wise	Part-Time			4	2	12	6
Lab Assistants	Part-Time	18		27		29	

Faculty / Name	Full-Time Part-Time	Summer 2016		Fall 2016		Spring 2017	
		Contact	Credit	Contact	Credit	Contact	Credit
Chad Pate	Full-Time	11/18	6	24	12	22	10
William Wise	Part-Time			4	2	12	6
Lab Assistants	Part-Time	18		27		29	

Faculty / Name	Full-Time Part-Time	Summer 2017		Fall 2017		Spring 2018	
		Contact	Credit	Contact	Credit	Contact	Credit
Chad Pate	Full-Time	11/18	6	24	12	22	10
William Wise	Part-Time			4	2	12	6
Lab Assistants	Part-Time	18		27		29	

**Faculty Demographics (2015-16; 2016-17; 2017-18)**

	# Employees	Avg. Years of Service	% of Classes Taught By
Full-Time	1	12	85%
Part-Time	2	8	15%

**Provide narrative for adequacy of faculty numbers.** *(Do you have enough faculty to support your program?)*

-Faculty is adequate for the program. Lab Assistants are critical for larger classes.

**Professional development activities of faculty (2015-16; 2016-17; 2017-18)**

Verify departmental professional development (PD) tracking logs are completed and filed in Program Review Professional Development folder.

Verified professional development tracking logs were completed and correct on January 14, 2019.

**Student Demographics**

<b>Gender (D50420) Unduplicated</b>			
Academic Year	Female	Male	Total
2015-2016	3	35	38
2016-2017	1	37	38
2017-2018	0	27	27

<b>Gender (C50420) Unduplicated</b>			
Academic Year	Female	Male	Total
2015-2016	0	6	6
2016-2017	0	4	4
2017-2018	0	6	6

<b>Ethnicity (D50420) Unduplicated</b>							
Academic Year	American Indian	African American	Asian or Pacific Islander	Hispanic	Caucasian	Other / Unknown / Multiple	Total
2015-2016	0	8	2	7	21	0	38
2016-2017	0	6	0	7	25	0	38
2017-2018	0	5	0	4	18	0	27

<b>Ethnicity (C50420) Unduplicated</b>							
Academic Year	American Indian	African American	Asian or Pacific Islander	Hispanic	Caucasian	Other / Unknown / Multiple	Total
2015-2016	0	0	0	2	4	0	6
2016-2017	0	0	0	1	3	0	4
2017-2018	0	2	0	1	3	0	6

<b>Age Groups (D50420) Unduplicated</b>						
<b>Academic Year</b>	<b>Under 18</b>	<b>18-24 years</b>	<b>25-34 years</b>	<b>35-44 years</b>	<b>45 and older</b>	<b>Total</b>
2015-2016	0	21	11	3	3	38
2016-2017	0	27	7	1	3	38
2017-2018	0	19	6	1	1	27

<b>Age Groups (C50420) Unduplicated</b>						
<b>Academic Year</b>	<b>Under 18</b>	<b>18-24 years</b>	<b>25-34 years</b>	<b>35-44 years</b>	<b>45 and older</b>	<b>Total</b>
2015-2016	0	5	1	0	0	6
2016-2017	0	4	0	0	0	4
2017-2018	0	6	0	0	0	6

**Provide narrative for analysis of student demographics.** *(Are you satisfied with your program demographics? Do you have a diverse population of students?)*

The majority of students are white (62%), male (96%), and between the ages of 18-34 (88%). While there is some student diversity in the program, the field of welding still predominantly consists of younger, white males.

**Program Enrollment (Fall, Spring, Summer)**

<b>Program Enrollment (D50420) Unduplicated</b>		
<b>Year</b>	<b>Enrollment</b>	<b>3-Year Average</b>
2015-16	38	45
2016-17	38	41
2017-18	27	34

<b>Program Enrollment (C50420) Unduplicated</b>		
<b>Year</b>	<b>Enrollment</b>	<b>3-Year Average</b>
2015-16	6	2
2016-17	4	3
2017-18	6	5

**Provide narrative for analysis of program enrollment.** *(Is enrollment increasing or decreasing? What possible reasons for increase/decrease? Describe how you plan to address program enrollment.)*

-3-Year Average has dropped due to a more favorable job market. Plan to communicate with local employers to encourage formal education before hiring and continue promoting Career and College Promise (CCP) to high schools.

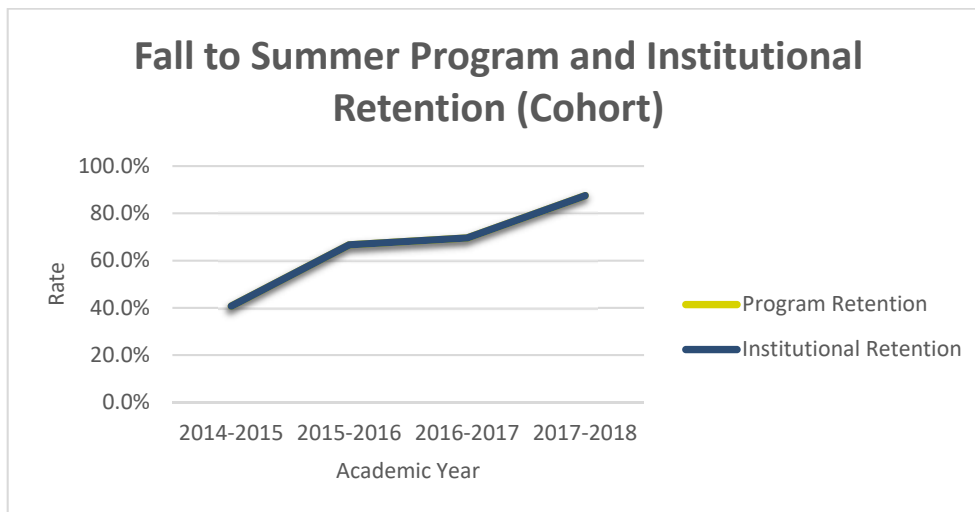
**Program Outcomes**

**Retention – Fall to Summer**

**Baseline:** 75% (Average of last three years – 2015-16; 2016-17; 2017-18, fall-to-summer program retention)  
**Standard:** 77%  
**Target:** 79%

**Data/Results:** Because this is a three-semester program, retention will be based on Fall to Summer.

Fall-Summer Program Retention D50420 (Cohort)							
Academic Year	Fall Enrollment	Grads	Return	Non-Completers	Program Retention	Program Transfer	Institutional Retention
2014-2015	27	3	8	16	40.7%	0	40.7%
2015-2016	27	6	12	15	66.7%	0	66.7%
2016-2017	23	6	10	7	69.6%	0	69.6%
2017-2018	16	5	9	2	87.5%	0	87.5%



**Provide narrative for analysis of program retention.** (Based on the data, provide a narrative of your analysis of fall to spring and fall to fall retention. Indicate factors that may have affected your retention. State any changes you plan to address for next year that may affect / increase your retention.)

Even though enrollment in the program has dropped over the last two years, program retention has continued to increase. We are very pleased with the 87.5% Fall to Summer retention rate for 2017-2018.

**Provide narrative for analysis of standard/target.** (As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

New standards and targets have been set based on data from a three-year average baseline.

## Completions

**Baseline:** 23 (Average of last three years – 2015-16; 2016-17; 2017-18)  
**Standard:** 30  
**Target:** 35

### Data/Results:

Number of Graduates (Completions) Unduplicated				
	Degree	Diploma	Certificate	Total
2015-16		15	4	19
2016-17		14	6	20
2017-18		15	14	29

**Provide narrative for analysis of completions.** (Are you satisfied with your completion rates? How might you increase your completion rates?)

Completion rates have increased steadily over the last three years, but we would like to increase completion rates. One area of emphasis for improvement will be the addition of Career and College Promise certificates.

**Provide narrative for analysis of standard/target.** (As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

Welding Technology is averaging 23 graduates per year over the last 3 years.

## Job Placement / Employment (to be provided by program)

**Baseline:** 86% (Average of last three years – 2015-16; 2016-17; 2017-18 of employment and/or seeking further education)  
**Standard:** 88%  
**Target:** 90%

### Data/Results:

Employment Demand						
Year	Graduates	# Employed (within 1 Yr)	# Seeking More Education (within 1 Yr)	% Employed & Seeking More Education	Unknown	Other/Comments
2015-16	19	13	3	84%	3	
2016-17	20	14	4	90%	2	
2017-18	29	18	6	83%	5	

**Provide narrative for analysis of job placement rates.** *(Are students finding jobs within the program of study?) (How can your program promote higher employment of students in the field?)*

Every student who has actively sought employment in the Welding field has been successful in finding gainful employment.

**Provide narrative for analysis of standard/target.** *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

New employment standards and targets were set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18.

**Provide narrative for analysis of Labor Market Data.** *(Review Labor Market Data provided and provide an assessment of the data.)*

Welders continue to be in high demand because of the diverse use of welding in many industries. Welding jobs (in 2018) were 44% above the national average. Welders make about \$17.29 per hour in Wayne County.

**Licensure and Certification Passing Rates (if applicable)**

**Baseline:** XX% *(Average of last three years; identify last three licensure years)*  
**Standard:** XX%  
**Target:** XX%

**Data/Results:** Not applicable

**Licensure / Certification Exam – Title**

Year	# Tested	% Passing
2010-11		
2012-13		
2013-14		
2014-15		
2015-16		
2016-17		

**Provide narrative for analysis of licensure / certification passing rates.** *(Are you satisfied with your program licensure rates?)*

Not applicable

**Provide narrative for analysis of standard/target.** *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

Not applicable

### Third-Party Credentials (if applicable)

**Baseline:** XX# (Average of last three years – 2015-16; 2016-17; 2017-18)  
**Standard:** XX%  
**Target:** XX%

**Data/Results:** Not applicable

### Third-Party Credentials

Year	Credentials for Program of Study	# Tested	# Completers
2015-16			
2016-17			
2017-18			

**Provide narrative for analysis of third-party credentials.** (Are there other industry-recognized credentials that needs to be addressed for the program of study?) (What are other means to promote program third-party credentials?)

Not applicable

**Provide narrative for analysis of standard/target.** (As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

Not applicable

### Course Success

#### Analysis of student success in courses (2015-16; 2016-17; 2017-18)

**Provide narrative for analysis of student success in courses.** (Ex – Are more students successful in online courses versus traditional? Are students more successful in certain courses?)

Students are more successful in traditional courses where hands-on Labs are prioritized. Students enrolled in web supported/assisted courses average 92% success rate, whereas students in traditional courses have a 97% success rate.

#### Analysis of student success in distance learning courses (2015-16; 2016-17; 2017-18)

Course Success Rates by Method of Instruction				
Semester	Department	Course Number	% Success	Method of Instruction
Fall 2015	WLD	121	100%	Independent Study
Fall 2015	WLD	110	91%	Traditional
Fall 2015	WLD	112	91%	Traditional
Fall 2015	WLD	115	96%	Traditional
Fall 2015	WLD	121	96%	Traditional
Fall 2016	WLD	110	89%	Web Support/Assisted
Fall 2016	WLD	112	89%	Web Support/Assisted



Fall 2016	WLD	115	89%	Web Support/Assisted
Fall 2016	WLD	121	92%	Web Support/Assisted
Spring 2016	WLD	112	88%	Web Support/Assisted
Spring 2016	WLD	116	94%	Web Support/Assisted
Spring 2016	WLD	122	95%	Web Support/Assisted
Spring 2016	WLD	131	88%	Web Support/Assisted
Summer 2016	WLD	132	100%	Web Support/Assisted
Summer 2016	WLD	141	95%	Web Support/Assisted
Fall 2017	WLD	110	100%	Traditional
Fall 2017	WLD	112	100%	Traditional
Fall 2017	WLD	115	100%	Traditional
Fall 2017	WLD	121	100%	Traditional
Spring 2017	WLD	112	95%	Traditional
Spring 2017	WLD	116	94%	Traditional
Spring 2017	WLD	122	100%	Traditional
Summer 2017	WLD	132	100%	Traditional
Summer 2017	WLD	141	100%	Traditional
Spring 2018	WLD	112	90%	Traditional
Spring 2018	WLD	116	94%	Traditional
Spring 2018	WLD	122	94%	Traditional
Spring 2018	WLD	131	92%	Traditional
Spring 2018	WLD	212	100%	Traditional
Summer 2018	WLD	132	100%	Traditional
Summer 2018	WLD	141	100%	Traditional

**Provide narrative for analysis of student success in distance learning courses.** (Are distance education course success rates equivalent to the success rates for other methods of instruction?)

Distance Learning courses are not a part of curriculum

**Analysis of Program Learning Outcomes (PLO) (2015-16; 2016-17; 2017-18)**

- Document PLO cycle for the next four years (2018-19, 2019-20, 2020-21, and 2021-22) in the table below. **-complete**
- File program learning outcome reports for the past three years (2015-16, 2016-17, and 2017-18) in the Program Review Attachment folder. **-Confirmed PLO Assessment Reports are in Review Form & Attachments folder in "U" Drive**
- Document changes to the program learning outcomes and/or assessment cycle. **-No changes**

Assessment Cycle	Program Learning Outcomes
2018-19 Collect in Summer/Analyze in Fall	<b>PLO 3:</b> Weld a Lap, T, and Corner joint using the GTAW process in steel, aluminum, and stainless
2019-20 Collect in Spring/Analyze in Fall	<b>PLO 1:</b> Weld a V-Groove in all positions using the SMAW process
2020-21 Collect in Spring/Analyze in Fall	<b>PLO 2:</b> Weld a Lap, T, and Corner joint using the GMAW process in steel, aluminum, and stainless
2021-22 Collect in Summer/Analyze in Fall	<b>PLO 3:</b> Weld a Lap, T, and Corner joint using the GTAW process in steel, aluminum, and stainless

## Other Assessments

### **Analysis of graduate survey data (2015-16; 2016-17; 2017-18)**

**Provide narrative for analysis of program-specific graduate survey data.** (*What did you learn from the results? What did your graduates indicate needed to be revised within your program?*)

-Students provided an overall positive response on graduate surveys. Students seem very satisfied with many aspects of the campus and what WCC offers. Areas that provide services directly to the students like student services, financial aid, and WCC Foundation was positive.

### **Analysis of employer survey data (2015-16; 2016-17; 2017-18)**

**Provide narrative for analysis of program-specific employer survey data.** (*What did employers indicate needs improvement within your program (equipment, facilities, program offerings/certificates?)*)

-Employers provide positive feedback on the Employer surveys. Employers are impressed with the equipment that we use to train and prepare our students.

## External Reviews

**In addition to SACSCOC, is there an accrediting body specifically related to the program? If so, please name the professional organization, describe the program's current status, and most recent date of accreditation.**

-No other accrediting body related to program

## Resources

### **Program facilities - location and adequacy**

**Provide narrative for program facilities adequacy and/or needs.**

-The Welding Technology Program needs additional space to provide a better learning environment for our students and to enable our program to grow and provide the most up to date equipment for our students to train and prepare for the work environment of the future. The college has obtained two grants (from the Duke Energy Foundation and Golden LEAF) to purchase new equipment, but we currently lack the space to purchase and install new equipment.

### **Library resources**

**Provide narrative for program library resources.** (*Are library resources adequate for your program?*)

-Library resources are adequate

### **Planning Objectives (2015-16; 2016-17; 2017-18)**

- Verify previous year's prioritized planning objectives end-of-year status reports are filed in Program Review Planning Objective EOY (End of Year) Status Reports folder.
- Provide a summary of planning objectives submitted for the last three years, including the use of results, of the planning objectives in the table provided.

### **Summary of Planning Objectives**

<b>Planning Year</b>	<b>Objective(s) Submitted</b>	<b>Use of Results</b>
2015-16	4 Tig Welders	Not Approved
2016-17	-Iron Worker Shear Master	-The new Shear went into service July 2017 and really made a difference with all welding classes.

	-Tig Welder	-Tig Welder Not Approved
2017-18	-2-Lincoln VRTEX Engage(Portable Virtual Reality Welding Machine)  -Tig Welder	-The new machines went into service Feb 2018 and really made a difference with the Spring 2018 welding classes. It also was very helpful with two career fairs and open house for recruiting.  -Tig Welder was approved and went into service January 2018. It really helped with WLD 131 and WLD 132 classes

**Overall analysis of the strengths of the program**

**Provide narrative for analysis of the strengths of the program.**

-Local manufacturing has maintained its strength and support of the Welding Program and has offered many job opportunities to students completing courses and the program.

**Overall analysis of the weaknesses of the program**

**Provide narrative for analysis of the weaknesses of the program.**

-Welding students leave program with limited field experience for job placement.

**Recommendations**

- Complete 2018-2019 Program/Service Review/Outcome Assessment Recommendation Worksheet to address action items from program review and outcome analysis with target date; and methods to assess action items.
- File Review/Outcome and Assessment Recommendation Worksheet in Recommendation and Follow-Up folder.
- Recommendation follow-up reports to be addressed spring semester following review year (2019-20 and 2020-21).

**Recommendations from Program Review and Outcome Assessments**

**2018-2019 Program Review and Outcome Assessments Recommendations**

*(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)*

<b>Outcome</b> <i>(Identify projected outcomes as a result of your program/service review.)</i>	<b>Target Date</b> <i>(Identify your projected target date for completion of action items.)</i>	<b>Actions/strategies to achieve outcomes and how you will assess the action/strategy</b>
Retention – Fall to Summer  Baseline = 75% Standard = 77% Target = 79%	2021-22 academic year (fall, spring, summer)	Talk with students regarding the importance of completing the program
Completions -  Baseline = 23 Standard = 30 Target = 35	2021-22 academic year (fall, spring, summer)	Will be adding Career and College Promise certificates

Job Placement (and/or seeking further education) –  Baseline = 86% Standard = 88% Target = 90%	2021-22 academic year (fall, spring, summer)	Try to internally track where students obtain employment
Licensure/Certification Passing Rates (if applicable) - Not applicable	N/A	N/A
Additional Recommendation -		
Additional Recommendation -		
Additional Recommendation -		

**Approvals**

- Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review the Program/Service Review and Outcome Assessments when completed by the responsible program/service personnel. The Office of Institutional Effectiveness will forward the review documents to the appropriate administrator upon completion.
- Using DocuSign (electronic signature), appropriate Vice President/Associate Vice President is asked to review and approve the Service Review and Outcome Assessment and Recommendations as submitted.

**IE Acceptance / Date:** DocuSigned by:  
*Dorothy Moore*  
C63FA9C7DD30473... 5/7/2020

**Administrator Approval / Date:** DocuSigned by:  
*Patty Pfeiffer*  
6FEB32F14792429... 5/7/2020